BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

DIVISION: BYATARAYANAPURA

SUB DIVISION: VIDYARANYAPURA

Name of Work: ***Estimate for Drilling of Borewell, Providing and Installing Pump, Motor and other accessories and Development of Parks and Providing Children Play and Gym Equipments at NTI Layout, Gurudharshan Layout in Ward No. 09 (Vidyaranyapura).***

Job Code: 009-21-000006

Estimated Cost Rs. 100.00 Lakhs

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Name of the work: **Estimate for Drilling of Borewell, Providing and Installing Pump, Motor and other accessories and Development of Parks and Providing Children Play and Gym Equipments at NTI Layout, Gurudharshan Layout in Ward No. 09 (Vidyarnayapura).**

							Est Cost:		9700000.00
Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging techinical personal and labour required etc., as per Specification and direction **(P. 104, I. 13.04) PRED SR 2019-20**	Each BW							
			2				**2**	3768.00	**7536.00**
2	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) **P. 103 / I. 13.1 PRED SR 2019-20**	Rmtr							
	0 to 50 m		2	50.00			**100.00**	347.00	**34700.00**
3	50 to 100 m		2	50.00			**100.00**	442.00	**44200.00**
4	100 to 150 m		2	50.00			**100.00**	456.00	**45600.00**
5	150 to 200 m		2	50.00			**100.00**	536.00	**53600.00**
6	200 to 250 m		2	50.00			**100.00**	634.00	**63400.00**
7	250 to 300 m		2	50.00			**100.00**	700.00	**70000.00**
8	300 to 350 m		2	50.00			**100.00**	825.00	**82500.00**
9	Supply of ISI mark 175 mm nominal bore, Plain end steel casing pipe - grade of Steel Fee 410 of wall thickness 5.4mm thick confirming to IS 4270:2001 and latest amendments, electric resistance welded steel tube material and confirming to IS 1387/1993 and manufactured by baseic open hearth electric or basic oxygen process in random length of 5 to 7 mts both ends threaded confirming tio IS 554/1985, one end fixied with socket confirming to IS 4270:2001 and the other end with screwed pipes ISI Marking weighing 25.10Kg/mtr (Inclusive of all taxes and durties) Prices include Collar-medium duty **P. 43, I No. 1119 PRED SR 2019-20**	Rmtr							
	175 mm dia MS Pipe x 5.4mm thick		2	80.00			**160.00**	1380.00	**220800.00**
10	Providing 250mm dia PVC Pipe 6kg/cm **BWSSB SR 2014-15 Page No. 53, Item No. 1(ii)**	Rmtr							
			2	18.00			**36.00**	1100.00	**39600.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
11	Providing and fixing Borewell Cap & Clamp Set **P. XLV[illegible] Sl No. 17 PWD SR 2018-19**	Set							
			2				**2**	1800.00	**3600.00**
12	Supply and delivery at site brand New texmo/ innoval/ Lubi/ Sabar / Atalanta/ Calamal/ make suitable for vertical installation in 150mm dia bore well comprising of single stage or multistage CF pump close coupled by measns of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for opertation of 3PH., 50 Hz, 380/440 volts AC supply fitted with required aqccessories such as suction, casing suction strainers sand guard Non return value etc. complete . The pump and motor shall form an integral unit with all the required fittings 12.50 HP 25 stage. ATALANTA< SUGNA< CRI, KIRLOSKAR and other Equivalent Pumps **PWD SR 2018-19 P. XLII Item No. 43 including of all taxes**	No							
	15 HP 30 Stage		2				**2**	63498.00	**126996.00**
13	GI Pipe 50 mm'B' class **Page No. XLVII Sl No. 1, PWD SR 2018-19**	m							
			2	320.00			**640.00**	415.00	**265600.00**
14	Heavy Duty Collar 50 mm dia **Page No. XLVII, SL No. 2, PWD SR 2018-19**	Nos							
			2	54.00			**108**	180.00	**19440.00**
15	Providing non-return valve 50 mm **Page No. XLVII, Sl No. 16, PWD SR 2018-19**	Nos							
			2				**2**	1800.00	**3600.00**
16	Providing Gate Valve 50 mm **Page No. XLVII, Sl No. 15, PWD SR 2018-19**	Nos							
			10				**10**	1800.00	**18000.00**
17	Supplying and Fixing Out Door Panel up to 15 HP **(PWD SR 2018-19 Page No. XLVII Sl No. 12)**	No.							
			2				**2**	15500.00	**31000.00**
18	Submersible Cable 1x3x6.0 Sq.mm **(PWD SR 2018-19 Page No. XLVII Sl No. 8)**	M							
			2x2	330.00			**1320**	144.00	**190080.00**
19	Labour charges for erection as new /repaired submercible pumpset allong with GI pipe (32/50mm) cable (new submercible pumpset if required will be supplied by the department free of cost and released pumpset shoud be handed over to department including transportation (Each lenth =6.00) **Page No. 558, Items No-3 BWSSB SR for 2014-15)**	Per Length							
			2	54.00			**108**	88.00	**9504.00**
20	Supplying and fixing 20"x20"x2.5" polished wood board made of not less than 15mm thick plank on both sides of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws., **P No. 24 / I No. 5.6.6 KPWD Electrical SR 2019-20**	Each							
			2				**2**	292.00	**584.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
21	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975GROUP-A **P No. 40 / I No. 6.4.3 4 core 16 Sqmm KPWD Electrical SR 2019-20**	Mtr							
			2	35.00			**70.00**	150.00	**10500.00**
22	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required. **P No. 41 / I No. 6.5.1 (6Sqmm to 16 Sqmm) KPWD Electrical SR 2019-20**	Mtr							
			2	35.00			**70.00**	11.88	**832.00**
23	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) **P No. 41 / I. No. 6.6.1 KPWD Electrical SR 2019-20**	Mtr							
	For Cutting Road Surface		2	30.00			**60.00**	76.00	**4560.00**
24	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV. **P. No. 41 / I No. 6.9.1 KPWD Electrical SR 2019-20**	Mtr							
	40mm dia GI pipe		2	4.00			**8.00**	335.00	**2680.00**
25	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc. **P. No. 42 / I.No. 7.10.2 KPWD Electrical SR 2019-20**	No.							
	16Sqmm		2				**2.00**	270.00	**540.00**
26	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia, **(P No. 40, I No. 6.1) KPWD Electrical SR 2019-20**	No							
			2				**2**	2999.70	**5999.00**
27	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers.**P No. 24 / I No. 5.7.2 KPWD Electrical SR 2019-20**	No.							
	32 Amps		2x6				**12**	174.00	**2088.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
28	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. **6-32Amps TPN P No. 27 / I No.5.17.7 KPWD SR 2019-20**	No							
			2				**2**	1715.00	**3430.00**
29	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete **P.No. 30, I. No. 5.42.2 KPWD Electrical SR 2019-20**	Sq.Cm							
	16SWG		2x2	120.00	60.00		28800.00		
			2	360.00	25.00		18000.00		
							46800.00	0.35	**16380.00**
30	Earthwork excavation for pipeline trenches including deporiting or bank up to a lead of 50 mtrs including shiriry and statting danger lighting and using site rails and boming poles at every 100 mtrs wherever necessary as directed in th following strata by Manual Means . **Page No. 07 / Item No.2.22.1 / PRED SR 2019-20 Ordinary Soil**	Cum							
			2	100.00	0.60	0.60	72.00		
	Basic Rate	262.00					**72.00**	262.00	**18864.00**
31	Providing and instalation at site of works P.V.C.Pipes including cost of pipes and specials and incluidng lowring into trenches, laying true to line, level and perfect linking at joints, leak proof including jointing encasing the pipe alround to a depth Not less than 15cm with grave or selected earth avalabile from the execavation Etc., **Page No.61 item No. 10.01.2 b PRED SR 2019-20.**	Rmtr							
	75 mm dia 6 KSC PVC pipe		2	100.00			200.00		
							200.00	207.00	**41400.00**
	Charges Basic Rate	207.00							
32	KSRRB M2100 Filling the foundations KSRRB 2100-6. Filling the foundations trenches using approved sand as per drawing and technical specifications in 250mm layers, wherever necessary watering and ramming, including cost of all materials, labour complete as per specifications. MORTH Chapter 12 **Item No. 27.14 Page No. 221, PWD SR 2018-19**	cum							
			2	100.00	0.60	0.20	24.00		
	Charges Basic Rate	3039.00					**24.00**	3221.34	**77312.00**
	Area Weightage @ 6%	182.34							
	Total	**3221.34**							
33	Refilling the basement and pipeline treanches with secleted available earthe for trench excavation including watering, consolidation in layers of 15 cm thick including disposing of the sunplus earth with a lead of 200 mtrs **Page No. 8 / Item No. 2.25 / PRED SR 2019-20**	Cum							
			Qty. Vide Item No. 30-32				**48.00**	103.00	**4944.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Baisc Rate	103.00							
	For Gym Equipments Work								
34	KSRB 2-1.1 : Earthwork in surface excavation in **ordinary soil** for levelling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and neatly dressed as per specifications. specification. No. KBS 2.1(a) / 2.3.1 **Page No. 6 / Item No. 2.1 of PWD SR 2018-19**	Cum							
			2	15.00	6.00	0.20	36.00		
			2x2	15.00	0.75	0.45	20.25		
			2x2	6.00	0.75	0.45	8.10		
	Basic Rate	249.00					**64.35**	352.14	**22660.00**
	Area Weightage @ 6%	14.94							
	Total	**263.94**							
	Average weight of earth 1.28 tonne / kg for 11.90 Km = 1.30 TX 10.00Km X 2.0/km= 26.0	26.00							
	Add loading and unloading Charges **It No 17.1 KSRRB M 100-1**	62.20							
		352.14							
35	KSRB 4-1.3 : Providing and laying in position **plain cement concrete of mix 1:4:8** with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, **in foundation**, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. **Page No.13, Item No. 4.3 of PWD SR 2018-19**	Cum							
			2x2	15.00	0.60	0.15	5.40		
			2x2	6.00	0.60	0.15	2.16		
	Basic Rate	5102.00					**7.56**	5408.12	**40885.00**
	Area Weightage @ 6%	306.12							
	Total	**5408.12**							
36	KSRB 5.2-3 : Providing and constructing granite / trap / basalt size stone masonry in **foundation with cement mortar 1:6, stone** hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 **Page No. 25 / Item No. 5.6. PWD SR 2018-19**	Cum							
			2x2	15.00	0.60	0.45	16.20		
			2x2	6.00	0.60	0.45	6.48		
	Basic Rate	4596.00					**22.68**	4871.76	**110492.00**
	Area Weightage @ 6%	275.76							
	Total	**4871.76**							
37	KSRB 5.3-3 : Providing and constructing granite / trap / basalt size stone masonry in **basement with cement mortar 1:6**, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 **Page No. 25 / Item No. 5.9. PWD SR 2018-19**	Cum							
			2x2	15.00	0.45	0.45	12.15		
			2x2	6.00	0.45	0.45	4.86		

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Basic Rate	5483.00					**17.01**	5811.98	**98862.00**
	Area Weightage @ 6%	328.98							
	Total	**5811.98**							
38	Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. – do – cement mortar 1:3 **Page. No. 255 / Item No.34.12.2 of PWD SR 2018-19**	sqm							
			2x2	15.00		0.45	27.00		
			2x2	6.00		0.45	10.80		
	Basic Rate	95.00					**37.80**	100.70	**3806.00**
	Area Weightage @ 6%	5.70							
	Total	**100.70**							
39	KSRRB M2100 Filling the foundations KSRRB 2100-6. Filling the foundations trenches using approved sand as per drawing and technical specifications in 250mm layers, wherever necessary watering and ramming, including cost of all materials, labour complete as per specifications. MORTH Chapter 12 **Item No. 27.14 Page No. 221, PWD SR 2018-19**	cum							
			2	15.00	6.00	0.45	81.00		
	Basic Rate	3039.00					**81.00**	3221.34	**260929.00**
	Area Weightage @ 6%	182.34							
	Total	**3221.34**							
40	KSRB 4-1.6 ; Providing and laying in position **plain cement concrete of mix 1:2:4** with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, **in foundation, plinth and cills**, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. **Page No.13, Item No. 4.6 PWD SR 2018-19**	Cum							
			2x2	15.00	0.45	0.10	2.70		
			2x2	6.00	0.45	0.10	1.08		
			2	15.00	6.00	0.10	18.00		
	Basic Rate	5483.00					**21.78**	5811.98	**126585.00**
	Area Weightage @ 6%	328.98							
	Total	**5811.98**							
41	Providing and laying flooring using **prepolished, water cut/gang saw 19mm thick granite** laid over bed of 20mm thick 1:4 cm & jointed with neat cement slurry mixed with pigment to mach shade of granite slabs including laying POP on finished surface and cleaning the surface, including the cost of all materials and labours etc., complete as per specifications. - **using silver grey granite / Multy Red / Ruby Red / Black / HassanGreen Granite of width not less than 1200mm (P.No.109, I.No.14.47.1 of PWD SR 2018-19)**	Sqm							
			2	15.00	6.00		180.00		
	Basic Rate	2739.00					**180.00**	2903.34	**522601.00**
	Area Weightage @ 6%	164.34							
	Total	**2903.34**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
42	KSRB 14.6-1: Providing and laying **heavy duty cobble stones 60mm thick interlock pavers**, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM of machineries complete as per specifications. Specification No. KBS. **(P.No. 103, I.No. 14.6 of PWD SR 2018-19)**	Sqm							
			2	80.00	2.50		400.00		
			2	90.00	2.50		450.00		
	Basic Rate	1053.00					**850.00**	1116.18	**948753.00**
	Area Weightage @ 6%	63.18							
	Total	**1116.18**							
43	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete **Page No. 27 / Item No. 5.30 PWD SR 2018-19**	No							
			2	120.00		/0.45	533		
			2	150.00		/0.45	667		
	Basic Rate	408.00					**1200**	440.64	**528768.00**
	Area Weightage @8%	32.64							
	Total	**440.64**							
44	KSRB 15-19.1 : Providing and applying ready mix priming coat **over concrete** / masonry / asbestos cement sheet / plastered surfaces including preparing the surface after thoroughly cleaning of oil, grease, dirt and other foreign matter, and sand papering including cost of materials, labour, complete as per specifications. **Page No. 124 / Item No. Item No. 15.80, PWD SR 2018-19**	Sqm							
	Kerb Stone Painting		2x2	120.00		0.45	216.00		
			2x2	150.00		0.45	270.00		
	Basic Rate	37.00					**486.00**	39.96	**19421.00**
	Area Weightage @8%	2.96							
	Total	**39.96**							
45	KSRB 15-19.2 : Providing and applying spray painting in two coats (excluding priming coat) over concrete / masonry / asbestos cement sheet / plastered surfaces with flat wall paint of approved brand to give even shade after cleaning the surface of all dirt, dust and other foreign matter, and sand papering including cost of materials, labour, complete as per specifications.**Page No. 124 / Item No. Item No. 15.81, PWD SR 2018-19**	Sqm							
			Qty Vide Item No. 44				486.00		
	Basic Rate	85.00					**486.00**	91.80	**44615.00**
	Area Weightage @8%	6.80							
	Total	**91.80**							
	Gym Equipments								

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
46	Supply and fixing of pull down challenger: Metal All tubular steel of 2.50 mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as neccessary and welded to an approved MIG process. All welds are dressed off removing all sharp edgesand burrs. Zinc primer paint is applied at all the welding points prior to fixing. All metal parts are powder coated using AKZO nobel Great wall powder to the thickness of 80-120 microns. All metals parts are tested in our salt spray machine that uses a 5% Na Cl Solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber : High quality grip rubber : 1 completely pre assembled equipment modules. Maintenance: Maintain according to EN 16630 EN16630 safety standard with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV CPSC or SGS only. The GS Marks EN16630 certificates must be in the name of tendering pat and not 3rd party. All products must tes must be in the name of tendering pat and not 3rd party. All products must clearly diply the GS mark as has been issued in the EN16630 saftey certificates. Size (LxWxH):	Nos							
			2				**2**	239400.00	**478800.00**
47	Supply and fixing of Seated Chest Press Metal All tubular steel of 2.5 mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edgesand burrs. Zinc primer paint is applied at all the welding points prior to fixning. All metal parts are powder coated using AKZO nobel Great wall powder to the thickness of 80-120 microns. All metals parts are tested in our salt spray machine that uses a 5% NaCl Solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber : High quality grip rubber : 1 completely pre assembled equipment modules. Maintenance: Maintain according to EN 16630 EN16630 safety standard with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV CPSC or SGS only. The GS Marks EN16630 certificates must be in the name of tendering pat and not 3rd party. All products must cleartes must be in the name of tendering pat and not 3rd party. All products must clearly diply the GS mark as has been issued in the EN16630 saftey certificates. Size (Lx	Each							
			2				**2**	229425.00	**458850.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
48	Supply and fixing of Self Weighted Rower All tubular steel of 2.5 mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edgesand burrs. Zinc primer paint is applied at all the welding points prior to fixning. All metal parts are powder coated using AKZO nobel Great wall powder to the thickness of 80-120 microns. All metals parts are tested in our salt spray machine that uses a5% Na Cl Solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber : High quality grip rubber : 1 completely pre assembled equipment modules. Maintenance: Maintain accoring to EN 16630 EN16630 safety standard with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV CPSC or SGS only. The GS Marks EN16630 certificates must be in the name of tendering pat and not 3rd party. All products must clearly dip GS mark as has been issued in the EN16630 saftey certificates. Size (1xWxH): 1214x900x1347mm weight :45 kg safety Area 4214x3900 mm capacity_2 persons .rson.	Each							
			2				**2**	164587.50	**329175.00**
49	Supply and fixing of Elliptical cross Trainer metalAll tubular steel of 2.5 mm thickness are galavnized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edgesand burrs. Zinc primer paint is applied at all the welding points prior to fixning. All metal parts are powder coated using AKZO nobel Great wall powder to the thickness of 80-120 microns. All metals parts are tested in our salt spray machine that uses a5% Na Cl Solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber : High quality grip rubber : 1 completely pre assembled equipment modules. Maintenance: Maintain accoring to EN 16630 EN16630 safety standard with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV CPSC or SGS only. The GS Marks EN16630 certificates must be in the name of tendering pat and not 3rd party. All products must c GS mark as has been issued in the EN16630 saftey certificates. Size (1xWxH): 1214x900x1347mm weight :45 kg safety Area 4214x3900 mm capacity_2 persons .rson.ity_2 perso	Nos							
			2				**2**	139650.00	**279300.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
50	Supply and fixing of Rider metal All tubular steel of 2.5 mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edgesand burrs. Zinc primer paint is applied at all the welding points prior to fixning. All metal parts are powder coated using AKZO nobel Great wall powder to the thickness of 80-120 microns. All metals parts are tested in our salt spray machine that uses a5% Na Cl Solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber : High quality grip rubber : 1 completely pre assembled equipment modules. Maintenance: Maintain accoring to EN 16630 EN16630 safety standard with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV CPSC or SGS only. The GS Marks EN16630 certificates must be in the name of tendering pat and not 3rd party. All products must clearly disply the tes must be in the name of tendering pat and not 3rd party. All products must clearly diply the GS mark as has been issued in the EN16630 saftey certif	Nos							
			2				**2**	89775.00	**179550.00**
51	Supply and fixing of Bicycle Metal: All tubular steel of 2.5 mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edgesand burrs. Zinc primer paint is applied at all the welding points prior to fixning. All metal parts are powder coated using AKZO nobel Great wall powder to the thickness of 80-120 microns. All metals parts are tested in our salt spray machine that uses a5% Na Cl Solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber : High quality grip rubber : 1 completely pre assembled equipment modules. Maintenance: Maintain accoring to EN 16630 EN16630 safety standard with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV CPSC or SGS only. The GS Marks EN16630 certificates must be in the name of tendering pat and not 3rd party. All products must clearly disply ttes must be in the name of tendering pat and not 3rd party. All products must clearly diply the GS mark as has been issued in the EN16630 saftey certificate	Each							
			2				**2**	124687.50	**249375.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
52	Supply and fixing of Twist Stepper All tubular steel of 2.5 mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edgesand burrs. Zinc primer paint is applied at all the welding points prior to fixning. All metal parts are powder coated using AKZO nobel Great wall powder to the thickness of 80-120 microns. All metals parts are tested in our salt spray machine that uses a5% Na Cl Solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber : High quality grip rubber : 1 completely pre assembled equipment modules. Maintenance: Maintain according to EN 16630 EN16630 safety standard with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV CPSC or SGS only. The GS Marks EN16630 certificates must be in the name of tendering pat and not 3rd party. All products must clearly disply t GS mark as has been issued in the EN16630 saftey certificates. Size (1xWxH): 1214x900x1347mm weight :45 kg safety Area 4214x3900 mm capacity_2 persons	Each							
			2				2	179550.00	359100.00
53	Supply and fixing of Big shoulder wheel All tubular steel of 2.5 mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edgesand burrs. Zinc primer paint is applied at all the welding points prior to fixning. All metal parts are powder coated using AKZO nobel Great wall powder to the thickness of 80-120 microns. All metals parts are tested in our salt spray machine that uses a5% Na Cl Solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber : High quality grip rubber : 1 completely pre assembled equipment modules. Maintenance: Maintain accoring to EN 16630 EN16630 safety standard with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV CPSC or SGS only. The GS Marks EN16630 certificates must be in the name of tendering pat and not 3rd party. All products must clearly disp GS mark as has been issued in the EN16630 saftey certificates. Size (1xWxH): 1214x900x1347mm weight :45 kg safety Area 4214x3900 mm capacity_2 persons .rson.	Each							
			2				2	119700.00	239400.00

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
54	Supply and fixing HD Health Walker All tubular steel of 2.[redacted]mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edgesand burrs. Zinc primer paint is applied at all the welding points prior to fixning. All metal parts are powder coated using AKZO nobel Great wall powder to the thickness of 80-120 microns. All metals parts are tested in our salt spray machine that uses a5% Na Cl Solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber : High quality grip rubber : 1 completely pre assembled equipment modules. Maintenance: Maintain accoring to EN 16630 EN16630 safety standard with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV CPSC or SGS only. The GS Marks EN16630 certificates must be in the name of tendering pat and not 3rd party. All products must clearly disply th GS mark as has been issued in the EN16630 saftey certificates. Size (1xWxH): 1214x900x1347mm weight :45 kg safety Area 4214x3900 mm capacity_2 persons .	Each							
			2				**2**	139650.00	**279300.00**
55	Supply and fixing HD Squat Pushing Metal: All tubular steel of 2.5 mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edgesand burrs. Zinc primer paint is applied at all the welding points prior to fixning. All metal parts are powder coated using AKZO nobel Great wall powder to the thickness of 80-120 microns. All metals parts are tested in our salt spray machine that uses a5% Na Cl Solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber : High quality grip rubber : 1 completely pre assembled equipment modules. Maintenance: Maintain accoring to EN 16630 EN16630 safety standard with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV CPSC or SGS only. The GS Marks EN16630 certificates must be in the name of tendering pat and not 3rd party. All products must clearly di GS mark as has been issued in the EN16630 saftey certificates. Size (1xWxH): 1214x900x1347mm weight :45 kg safety Area 4214x3900 mm capacity_2 persons .rson.ity_2	Each							
			2				**2**	214462.50	**428925.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
56	Supply and fixing Mini Ski. Metal: All tubular steel of 2.5 mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edgesand burrs. Zinc primer paint is applied at all the welding points prior to fixning. All metal parts are powder coated using AKZO nobel Great wall powder to the thickness of 80-120 microns. All metals parts are tested in our salt spray machine that uses a5% Na Cl Solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber : High quality grip rubber : 1 completely pre assembled equipment modules. Maintenance: Maintain accoring to EN 16630 EN16630 safety standard with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV CPSC or SGS only. The GS Marks EN16630 certificates must be in the name of tendering pat and not 3rd party. All products must clearly diply thetes must be in the name of tendering pat and not 3rd party. All products must clearly diply the GS mark as has been issued in the EN16630 saftey certific	Each							
			2				2	159600.00	**319200.00**
57	Supply and fixing of HD Double Health Walker Metal: All tubular steel of 2.5 mm thickness are galvanized and zinc dipped. Joints are Robotic welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edgesand burrs. Zinc primer paint is applied at all the welding points prior to fixing. All metal parts are powder coated using AKZO nobel Great wall powder to the thickness of 80-120 microns. All metals parts are tested in our salt spray machine that uses a5% Na Cl Solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Rubber : High quality grip rubber : 1 completely pre assembled equipment modules. Maintenance: Maintain accoring to EN 16630 EN16630 safety standard with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV CPSC or SGS only. The GS Marks EN16630 certificates must be in the name of tendering pat and not 3rd party. All products must ctes must be in the name of tendering pat and not 3rd party. All products must clearly diply the GS mark as has been issued in the EN16630 saftey certificates. Size (LxWxH	Each							
			2				2		
							2	239400.00	**478800.00**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
58	Supply and fixing of HD Waist Twister Metal: All tubular steel of 2.5mm thickness are galvanized and zinc dipped joints are robotic welded all welded joints are scalloped as necessary and welded to an approved MIG process All welds are dressed off removing all sharp edges and burrs Zonc primer paint is applied at all the welding points prior to finishing all metal parts are powder coated using AKZO Nobel Grate wall powder to the thickness of 80-120 microns all metal parts are tested in our salt spray machine that uses a 5% NACI solution in accordance to ISO7227 to speed up corrosion for 3000 hrs Rubber: High quality grip rubber is used for the handles Bearings: Maintenance free ball berings Scope of delivery 1 Completely pre assembled equipment modules Maintenance: Maintenance: Maintain accoring to EN 16630 EN16630 safety standard with GS test mark. The EN 16630 certificates must be issued by a reputed notified international certifying agency such as IPEMA, TUV CPSC or SGS only. The GS Marks EN16630 certifica GS mark as has been issued in the EN16630 saftey certificates. Size (1xWxH): 1214x900x1347mm weight :45 kg safety Area 4214x3900 mm capacity_2 persons .rson.ity_2 persons. 1460 x 1310 x 1150 mm weight : 39.1 kg safety Area 4360 x 4510 mm capacity_3 persons .	Each							
			2				2	130000.00	260000.00
59	Supplying of Granite benches as per approved drawing including cost of steel, materials, labour, transportation etc complete as per specification (Approved Rate)	Nos							
			5				5	10500.00	52500.00
	Basic Rate	10500.00							
	Sub Total A								**8640521.00**
	GST @ 12%								**1036863.00**
	BESCOM Deposit for Borewell	L/S	2	11000.00					**22000.00**
	Miscellaneous and Unforeseen Charges	L/S							**616.00**
								Total	**9700000.00**
Rupees Ninety Seven Lakh(s) Only									

CERTIFICATE:

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per PWD SR 2018-19,PWD Elecrical 2019-20, PRED 2019-20, BWSSB SR 2014-15.
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Vidyaranyapura Sub Division

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division
30/09

ADMINISTRATIVE APPROV.
Accorded For Rs. 97.00 Lakhs.
Head of A/c. P-0299
Div. Ref. No. 50 Date. 8/10/20
30/09
AE
EE(BTP)

Technical Sanction
Accorded For Rs 97.00 Lakhs only
Head of A/C P 0299
CER NO : 133 Dt 09.11.2020
CE (WNK)